

**REMARKS**

Upon entry of the present amendment, claims 1-2, 4-5 and 11-12 will remain pending in the above-identified application and stand ready for further action on the merits.

The present amendments to the claims do not incorporate new matter into the application as originally filed. For example, claim 1 has simply been amended to delete the word "derivative" previously recited therein, and claims 8-9 have been cancelled in order to expedite further prosecution of the instant application to allowance.

Accordingly, entry of the instant amendment and favorable action on the merits is earnestly solicited at present.

***Enclosed 37 CFR § 1.132 Declaration***

A 37 CFR § 1.132 declaration of Mr. Takuo Mizutani is attached to the instant reply. The Examiner is respectfully requested to review Mr. Mizutani's enclosed declaration at this time since it contains therein comparative test results evidencing that the instant invention has associated therewith advantageous properties that are not associated with the comparative examples tested (*e.g.*, see Table A and subsequent remarks that are each set forth at page 5 of Mr. Mizutani's enclosed declaration).

***Claim Objections***

Claims 8-9 are objected to under 37 CFR § 1.75(c) as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Claims 8-9 have been cancelled herein. Therefore, Applicants respectfully submit that this objection has been rendered moot and should therefore be withdrawn.

***Claim Rejections under 35 USC § 112***

Claims 1-2, 4-5, 8-9 and 11-12 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The rejection is based on the prior use of the term “derivative” in independent claim 1. Reconsideration and withdraw of the above rejection is requested based on the amendment of claim 1 herein to remove the word “derivative” therefrom.

***Claim Rejections under 35 USC § 103***

Claims 1-2, 4, 8-9 and 11 are rejected under 35 USC § 103(a) as being improper over **Ichikawa US ‘624** (US 5,980,624) in view of **Hawley’s Condensed Chemical Dictionary** (page 470 – boiling point of ethylene glycol ethyl ether acetate) and **Suzuki et al. US ‘832** (US 6,245,832).

Claims 1-2, 8-9 and 11-12 are rejected under 35 USC § 103(a) as being unpatentable over **WO ‘619** (WO 02/556619) in view of **Zhu et al. US ‘175** (US 6,251,175) and **Ohta et al. US ‘866** (US 5,954,866).

Claim 4 is rejected under 35 USC § 103(a) as being unpatentable over **WO ‘619** in view of **Zhu et al. US ‘175** and **Ohta et al. US ‘866**, further in view of **Suzuki et al. US ‘832**.

***Legal Standard for Determining Prima Facie Obviousness***

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to

combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

“There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art.” *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a *prima facie* case of obvious was held improper.).

“In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification.” *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. “The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the

nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also *In re Lee*, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to combine references); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The Supreme Court of the United States has recently held that the teaching, suggestion, motivation test is a valid test for obviousness, but one which cannot be too rigidly applied. See *KSR Int'l Co. v. Teleflex Inc.*, 127 SCt 1727, 82 USPQ2d 1385 (U.S. 2007). The Supreme Court in *KSR Int'l Co. v. Teleflex, Inc.*, *ibid.*, reaffirmed the Graham factors in the determination of obviousness under 35 U.S.C. § 103(a). The four factual inquiries under Graham are:

- (a) determining the scope and contents of the prior art;
- (b) ascertaining the differences between the prior art and the claims in issue;
- (c) resolving the level of ordinary skill in the pertinent art; and
- (d) evaluating evidence of secondary consideration.

*Graham v. John Deere*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (U.S. 1966).

The Court in *KSR Int'l Co. v. Teleflex, Inc.*, *supra.*, did not totally reject the use of "teaching, suggestion, or motivation" as a factor in the obviousness analysis. Rather, the Court recognized that a showing of "teaching, suggestion, or motivation" to combine the prior art to meet the claimed subject matter could provide a helpful insight in determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a).

Even so, the Court in *KSR Int'l Co. v. Teleflex, Inc.*, *ibid.*, rejected a rigid application of the "teaching, suggestion, or motivation" (TSM) test, which required a showing of some teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the prior art elements in the manner claimed in the application or patent before holding the claimed subject matter to be obvious.

Accordingly, while the courts have adopted a more flexible teaching, suggestion, motivation (TSM) test in connection with the obviousness standard based on the *KSR v. Teleflex* case, which case involved a mechanical device in a relatively predictable technological area, it remains true that, despite this altered standard, the courts recognize inventors face additional barriers in relatively unpredictable technological areas as noted in *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.*, 83 USPQ2d 1169 (Fed. Cir. 2007).

Further, the Examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336, quoted with approval in *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

*Distinctions Over the Cited Art*

Ichikawa US '624 discloses an oil base ink composition suitable for recording ink such as an ink jet ink, which prevents blur, has a good drying property, a good sealing property and a

property to prevent dry-up at a pen tip. In Example 8, Ichikawa evaluated the property to prevent dry-up at a pen tip by taking off a cap for 5 hours and then using the pen for writing.

Ohta et al. US '866 discloses an ink for an ink jet recording and intends to form high quality images on a recording medium having a layer comprising a water-soluble resin. In the Examples, Ohta et al. evaluated clogging of nozzles, intermittent ink ejection stability and image quality.

Suzuki et al. US '832 intends to provide an ink for ink jet recording, capable of forming a high-resolution, high-density uniform image on a paper without causing blotting or fogging, prevented from generation of clogging at the nozzle tip and having good long-term storage stability. In the Examples, Suzuki et al. evaluated the clogging property, clogging recoverability, abrasion resistance, drying property, etc.

Zhu et al. US '175 discloses a jet ink composition which improves printing quality on a porous or non-porous substrate and controls the droplets on the surface of a substrate. In the Examples, Zhu et al. evaluated the adhesion of the ink to the non-porous substrate and the drying property.

*Advantageous Properties Associated with the Claimed Invention*

The present invention achieves water resistance, low cockling, good anti-grazing and good drying properties. To show that these properties are advantageously attained by the present application, the Applicants enclose herewith a 37 CFR § 1.132 Declaration of Mr. Takuo Mizutani (*attached hereto*). The results reported by Mr. Mizutani in the enclosed Declaration show that the advantageous effects of the present invention can be achieved in the ranges recited in instantly pending independent claim 1 (*the sole independent claim*).

None of the cited references disclose or teach that water resistance, cockling of a recording medium, anti-grazing and drying property can be improved in the boiling point range of a solvent (*i.e.*, at least 150°C) and the acid value range (*i.e.*, 10 to 300 mg-KOH/g) that are recited in instantly pending claim 1 of the present invention.

Accordingly, the present invention and its associated advantageous properties are in no way rendered obvious from the combination of the cited references being applied by the USPTO. This is because no teaching, disclosure, reason or rationale is found or provided in the cited art of record (whether considered singularly or in combination) that that would allow one of ordinary skill in the art to arrive at the instant invention as claimed, including each of the advantageous properties that are possessed thereby. Any contentions of the USPTO to the contrary must be reconsidered at present.

### **CONCLUSION**

Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that each of pending claims 1-2, 4-5 and 11-12 are allowed and patentable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

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Enclosure : 37 CFR § 1.132 Declaration of Mr. Takuo Mizutani (6 pages)